PATENT APPLICATION Attorney's Docket No.: 1314.1058-001



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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and Ulrich Certa

Application No.:

09/523,066

Group Art Unit: 1655

Filed:

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Examiner: B. Forman

For:

GENE CHIP TECHNOLOGY FOR DETERMINING MEMORY GENES

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PETITION UNDER 37 C.F.R. § 1.144

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

On May 23, 2001, Applicants filed an Amendment A in which, *inter alia*, a request was made to withdraw the restriction requirement in the above-identified patent application. On July 13, 2001 that request was denied and the restriction requirement was made final by the Patent Office. Applicants hereby petition to obtain review of the Examiner's decision to maintain the restriction requirement.

The facts are as follows:

In the Office Action dated November 20, 2000 (Paper No. 7), a restriction requirement was set forth stating two groups. Group I, which included Claims 1-10 and 16-23, was directed

to methods of identifying a gene or genes in non-human animals. Group II, which included Claims 11-15 and 24-26, was directed to methods of identifying a gene or genes in Drosophila.

The Examiner stated that restriction was proper because the inventions "are not disclosed as capable of use together and they have different modes of operation and different functions" and thus, are unrelated methods. Paper No. 7, at page 2, lines 8-10. More specifically, the Examiner argued that:

the method of Invention I operates by training non-human animals and extracting brain-specific RNA for analysis and function to identify non-human gene or genes and the method of Invention II operates by training Drosophila and extracting head tissue-specific RNA for analysis and functions to identify a Drosophila gene or genes. Paper No. 7, at page 2, lines 12-16.

On May 23, 2001, Applicants filed an Amendment A in which they provisionally elected to prosecute the claims of Group II and presented arguments to traverse the restriction requirement.

In particular, Applicants stated in Amendment A that the methods defined by Groups I and II are related to each other in that the methods all relate to identifying a gene or genes involved in transcription-dependent memory. In addition, the methods all comprise the steps of (a) training non-human animals under conditions sufficient to induce transcription-dependent memory formation in the animals; and (b) extracting RNA from brain tissue of the trained animals. More specifically, with regard to step (a), the Group II claims require the training of Drosophila. With regard to step (b), the Group II claims require extracting RNA from head tissue of trained Drosophila. Drosophila are non-human animals and Drosophila head tissue is considered to be equivalent to Drosophila brain tissue. Thus, the methods defined by Group I include embodiments which are also embraced by the methods defined by Group II. As such, the restriction requirement between Groups I and II is improper.

Applicants also stated that the methods defined by Group I and the methods defined by Group II are also related to each other as a genus and species. M.P.E.P. §§ 806.04 and 809.02. As discussed above, the claims of Group I require in step (a) training non-human animals and in step (b) extracting RNA from brain tissue of the trained animals. The claims of Group II require in step (a) training of Drosophila (which is a non-human animal) and in step (b) extracting RNA from head tissue (which is considered to be brain tissue) of trained Drosophila. Accordingly, Group I is generic to and embraces Group II. The methods defined in the two groups overlap in the mode of operation and function. As such, the restriction requirement set forth is improper.

In addition, Applicants argued that the examination of Groups I and II together would not place an undue burden upon the Examiner. A search of the prior art for the inventions defined by Groups I and II is the same, given that the domestic and international classification for each invention is the same (e.g., U.S. Class 424, subclass 9.1). A search of the prior art for the methods defined by one group would also identify prior art that is applicable to the other group. Furthermore, a complete search, including a literature search, of one invention would necessarily entail a search of the other invention. For example, a search of the prior art for the methods defined by Group II would necessarily identify prior art that is applicable to Group I.

In the Office Action dated July 13, 2001 (Paper No. 10), the Examiner maintained and made final the restriction requirement, stating that the restriction is proper "because dependent inventions may be properly restricted if they are distinct" (Paper No. 10, at page 2, lines 12-13) and "undue burden would be required to examine the claims of group I along with claims of group II" (Paper No. 10, at page 2, lines 20-21). The Examiner maintained that undue burden would be required to search the two groups together because (1) the claims of each group "have acquired a separate status in the art as recognized by their divergent subject matter" and (2) "a search of the invention of Group I would encompass extensive search of all non-human animals not encompassed by the search of invention of Group II and the search of the invention of Group II encompasses extensive Drosophila-specific search not encompassed by the search of the invention of Group I." Paper No. 10, at page 2, line 20 to page 3, line 3. Applicants respectfully disagree with the Examiner's assessment that the restriction requirement is proper.

As set forth in 37 C.F.R. § 1.142(a), a proper requirement for restriction between patentably distinct inventions requires that the invention must be independent and distinct as claimed. M.P.E.P. § 803 provides that:

If the search and examination of an entire application can be made without serious burden, the examiner <u>must</u> examine it on the merits, even though it includes claims to distinct or independent inventions (emphasis added).

The Examiner has not provided any reasoning in support of the conclusion that the subject matter of the two groups is "divergent". The considerable overlap of the subject matter of proposed Inventions I and II, as discussed above, is evidence that these Inventions are not divergent. In addition, as discussed above, the domestic and international classifications for each invention are the same. In fact, class 424, subclass 9.1 is indicated by the Examiner to be the classification for each invention (see Paper No. 7, at page 2). Thus, a search of the prior art for

the inventions defined by Groups I and II is the same. In addition, since Drosophila are non-human animals, a search of the prior art for the methods defined by Group II would necessarily identify prior art that is applicable to Group I. Accordingly, no excessive searching burden would be placed upon the Patent Office in examining Groups I and II together.

For the foregoing reasons, it is submitted that the Examiner erred in making and maintaining the restriction requirement, and reversal is respectfully requested.

Please charge any fees that may be due in this matter to Deposit Account No. 08-0380.

Respectfully submitted,

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